

REMARKS

Regarding Noted Typographical Errors

Typographical errors in claims 1 and 19 were noted and correction was required. Claim 1 has been amended to insert a space to change "lysineand" to "lysine" and "and" as instructed. Claim 19 has been amended resulting in elimination of the offending word "of." In addition, in claim 4, the improperly spelled word "cyclic" has been correctly spelled as "cyclic."

Regarding the Double Patenting Rejection

It is noted that a Terminal Disclaimer has been requested by the Office. A Terminal Disclaimer is being prepared and will be provided upon completion of the paperwork necessary to evidence and record ownership of the invention.

Regarding the Rejections under 35 U.S.C. §112, second paragraph

Claim 19 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite in view of the inclusion of the phrase "i.e." within the claim. Claim 19 has been amended to remove the offending term and more clearly indicate the claimed composition. No new matter was included to accomplish the amendment provided.

Claim 5 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite in view of the limitations to "caprylic acid or pelargonic acid" which the Office Action believes lacks an antecedent basis in claim 1. Although caprylic acid and pelargonic acid are fatty acids and should not have been included in the listing of carboxylic acids in

claim 1, as applicant understands was suggested, claim 5 has been amended to more clearly identify the two acids as fatty acids. Applicant believes claim 5, as amended, complies with the requirements of 35 U.S.C. §112, second paragraph.

Regarding the Rejections under 35 U.S.C. §102(b)

Claims 1, 4, 6, 10-12, 15-20 and 23-25 were rejected under 35 U.S.C. §102(b) as being anticipated by Herdt et al. (U.S. Patent No. 5,998,358). According to the Office Action, Herdt et al. discloses a composition comprising a fatty acid, a carboxylic acid and a carrier, water. To support each aspect of its position, the Office Action cites portions of the '358 patent. Column 11, line 5 was cited to support the presence of a short chain fatty acid in the composition disclosed. Beginning with column 10, line 67 of column 10 and continuing with column 11, line 1 the '358 patent teaches:

Examples of nonionic low foaming surfactants include: Nonionics that are modified by "capping" or "end blocking" the terminal hydroxyl group or groups (of multifunctional moieties) to reduce foaming by reaction with a small hydrophobic molecule such as propylene oxide, butylenes oxide, benzyl chloride, and short chain fatty acids, alcohols or alkyl halides containing from 1 to about 5 carbon atoms; and mixtures thereof.

Rather than teaching the incorporation of a fatty acid in the composition taught, the '358 patent teaches the incorporation of a nonionic surfactant prepared by "capping" a nonionic surfactant having a terminal hydroxyl group or groups. The capping reaction involves forming an ester linkage between the carboxyl group on the fatty acid and the terminal hydroxyl group of the nonionic surfactant. Therefore this teaching does not teach a composition containing a fatty acid.

The Office Action further cites columns 14-16, Tables 1-3 as disclosing formulations containing specific weight percentages of a C10 fatty acid. Tables 2 and 3 list varying amounts of raw materials, one of which is identified as a "C10 F.A." This raw material is listed just above the raw materials Butyl Carbitol and Butyl Cellosolve, both of which are hydroxy ethers derived from ethylene oxide having a terminal hydroxy group. Table 5 provides additional information regarding the identity of the raw materials utilized in Tables 2 and 3. A C10 F.A. is described as a raw material identified as a C₁₀ Fatty Acid. Although the portions of the '358 patent cited support the use of a C10 fatty acid as a raw material for the compositions taught, no portion of the '358 patent cited supports a composition that actually contains a fatty acid. The '358 patent only teaches using a C10 fatty acid as a raw material 'for "capping" or "end blocking" the terminal hydroxyl group or groups (of multifunctional moieties) to reduce foaming.' Table 2 and 3 positions the C10 fatty acid just above the two components having a terminal hydroxyl group. Sufficient excess hydroxyl compound is provided to esterify all of the C10 fatty acid designated, leaving sufficient hydroxyl compound to function as a solvent.

According to MPEP 2131, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." As noted in *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983), "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." The '358 patent cited describes the use of a C10 fatty acid to cap nonionic surfactants and lists a C10 fatty acid as a raw material. Because the Office Action did not cite any

portion of the '358 patent that taught a composition specifically containing a fatty acid, no prima facie case of anticipation has been established.

Regarding the Rejections under 35 U.S.C. §103(a)

Claims 2-3, 5 and 21-22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Herdt et al. (U.S. Patent No. 5,998,358) in view of Puritch et al. (U.S. Patent No. 5,106,410).

(a) Failure to establish a prima facie case of obviousness --- First, for the reasons noted above, the '358 patent does not teach a composition containing a fatty acid. As a result, the '358 patent does not support the obviousness rejection provided.

Second, the Office Action characterizes Puritch et al. as teaching "...a herbicidal or fungicidal composition..." that "...comprises a ready-to-use microemulsion having a fatty acid active ingredient and water (Abstract, line 1-4 and 6; column 1, line 13-14)." The abstract cited does not refer directly or indirectly to a fungicide, but only mentions herbicides. The reference in column 1 mentions the word fungicide to define the term pesticide in a generic sense as including "insecticides, fungicides, herbicides, and miticides" and then notes that "Although useful in controlling insect and mite populations as well as the growth of unwanted flora and fungi, many pesticides have been found to be harmful to the environment as well as to humans, other mammals, birds and fish." The background section then proceeds to mention specific insecticidal and herbicidal compositions which contain fatty acid components. A thorough review of the '410 patent, including a word search, failed to locate any further reference to a fungicide or fungi. The '410 patent is simply not directed to a formulation that functions as a

fungicide. Because, the combination of the '358 patent and the '410 patent do not provide any teaching as to a fungicidal composition with or without a fatty acid, the prima facie case of obviousness fails.

(b) Unexpected beneficial properties overcome any prima facie case of obviousness --- Had a prima facie case of obviousness been established, applicant's showing of an unexpected synergistic effect resulting from the combination of a fatty acid and a carboxylic acid would refute the asserted obviousness. For example, Tables 4 and 5 illustrate that the carboxylic acid, glycolic acid alone, and the fatty acid, caprylic acid have a limited ability to control a fungal infection on strawberries. However, the combination of glycolic acid and caprylic acid substantially reduce the level of fungal infection. This unexpected synergistic effect of the combination of a fatty acid and a carboxylic acid, different from the fatty acid, is not taught or suggested by the '358 patent, the '410 patent or their combination. As noted in *in re Papesch*, 315 F.2e 381, 137 USPQ 43 (C.C.P.A. 1963),

It is interesting to observe here the applied principle working both ways. Where what we may call the apparent obviousness of the compound (including its properties) was overcome by evidence of unexpected advantageous properties, the claim to it was held patentable; but where no such properties were shown to exist it remained an obvious compound with obvious properties.

Claims 1-6, 10-12 and 15-25 stand rejected. For the reasons provided above the rejections of each of these claims is respectfully traversed. In view of the above, it is submitted that claims 1-6, 10-12 and 15-25 are in condition for allowance.

Reconsideration and withdrawal of the rejections are requested. Upon allowance of generic claim 1, applicant understands that the claims withdrawn because of the species

election, claims 7-9, 13, and 14, will be reconsidered. Allowance of claims 1-6, 10-12 and 15-25 and reconsideration of claims 7-9, 13, and 14, at an early date are solicited. Should the Examiner have any questions about this submission or should there be other matters which might be readily resolved, the Examiner is invited to telephone the undersigned attorney.

Respectfully submitted,

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